ABSTRACT

The present invention relates to a method for depositing a parylene polymer barrier coating on a polymeric substrate for improving the chemical resistance of the substrate. The method comprises the steps of thoroughly treating a surface portion of the substrate to remove any contaminants, depositing at least one layer of parylene polymer on the contaminant-free surface portion via chemical vapor deposition, and then annealing each of the at least one layer of parylene polymer for a sufficient time. The present invention also relates to a composition for a barrier coating on a polymeric substrate comprising at least one layer of parylene polymer bonded to the surface of the polymeric substrate. The substrate can be a silicone rubber keypad.